

Notice of Allowability

Application No.

09/654,893

Examiner

Mariceli Santiago

Applicant(s)

SHINODA ET AL.

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed December 31, 2003.
2. ☒ The allowed claim(s) is/are 28-32,34,35,37,38,40-44,46-50,52,53,55-61,63-67,69 and 72-78.
3. ☒ The drawings filed on 05 September 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 08/010,169.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____. |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Amendment

The Amendment, filed on December 31, 2003, has been entered and acknowledged by the Examiner.

Cancellation of claims 1-27, 33, 36-39, 45, 51, 54, 62, 68, 71 and 79-84 has been entered.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the specification,

Page 1, first line after the title, insert the following text:

--This is a continuation of Application No. 08/800,759, filed February 13, 1997, now Patent No. 6,195,070, which is a continuation of Application No. 08/469,815, filed June 6, 1995, now Patent No. 5,661,500, which is a continuation of Application No. 08/010,169, filed January 28, 1993, abandoned.--

Terminal Disclaimer

The terminal disclaimer filed on November 11, 2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 5,661,500 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

Claims 28-32, 34, 35, 40-44, 46-50, 52, 53, 55-61, 63-67, 69, 70 and 72-78 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Regarding claim 28, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 28, and specifically comprising the limitation of an address electrode on the first substrate and extending in the first direction, a pair of display electrodes formed on a surface of a second substrate covered by an insulating layer and positioned in opposed relationship with the address electrode, the pair of display electrodes extending in a second direction and defining the discharge cell, wherein a width of the cell, in the second direction is approximately one-third a length thereof, in the first direction, and a phosphor layer disposed within the cavity on one of the first and second substrates, the phosphor layer having a thickness in a range of from 10 μm to 50 μm .

Regarding claims 29-32 and 34, claims 29-32 and 34 are allowable for the reasons given in claim 28 because of their dependency status from claim 28.

Regarding claim 35, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 35, and specifically comprising the limitation of each set of discharge cells has respective first and second combined dimensions in the first and second direction which are substantially the same and comprises a common number of discharge cells in successively spaced adjacent positions in the second direction, the respective phosphor layers of each set of the discharge cells being in a common sequence of respective different colors, and the plural rows of the array having respective common numbers of sets of discharge cells aligned in the columns of the array.

Regarding claims 40-44, claims 40-44 are allowable for the reasons given in claim 35 because of their dependency status from claim 35.

Regarding claim 46, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 46, and specifically comprising the limitation of a pair of display electrodes superposed on a surface of a second substrate, covered by an insulating layer and positioned in opposed relationship with respect to the address electrode, the pair of display electrodes extending in a second direction, and defining the discharge cell, wherein a width of each cell, in the second direction, is approximately one-third a length thereof, in the first direction, and a phosphor layer disposed within the cavity and superposed on one of the first and second substrates, the phosphor layer having a thickness in a range of from 10 μm to 50 μm .

Regarding claims 47-50 and 52, claims 47-50 and 52 are allowable for the reasons given in claim 46 because of their dependency status from claim 46.

Regarding claim 53, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 53, and specifically comprising the limitation of each set of discharge cells has respective, first and second combined dimensions in the first and second directions which are substantially the same and comprises a common number of discharge cells in successively spaced adjacent positions in the second direction, the respective phosphor layers of each set of the discharge cells being in a common sequence of respective, different colors, and the plural rows of the array having respective, common numbers of sets of discharge cells, aligned in the columns of the array.

Regarding claims 55-61, claims 55-61 are allowable for the reasons given in claim 53 because of their dependency status from claim 53.

Regarding claim 63, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 63, and specifically comprising the limitation

Art Unit: 2879

of a pair of display electrodes supported by a front substrate, covered by an insulating layer and positioned in opposed, spaced relationship with respect to a portion of the aligned address electrode and defining the discharge cell therebetween, said pair of display electrodes extending in a second direction, and a phosphor layer disposed within the cavity and supported on the cavity sidewall and the portion of the aligned address electrode a width of each disclosed cell, in the second direction, is approximately one-third a length thereof, in the first direction.

Regarding claims 64-67 and 69, claims 64-67 and 69 are allowable for the reasons given in claim 63 because of their dependency status from claim 63.

Regarding claim 70, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 70, and specifically comprising the limitation of each set of discharge cells has respective, first and second combined dimensions in the first and second directions which are substantially the same comprises a common number of discharge cells in successively spaced adjacent positions in the second direction, the respective phosphor layers of each set of the discharge cells being in a common sequence of respective, different colors, and the plural rows of the array having respective, common numbers of sets of discharge cells, aligned in the columns of the array.

Regarding claims 72-78, claims 72-78 are allowable for the reasons given in claim 70 because of their dependency status from claim 70.

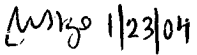
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

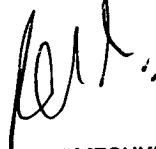
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Mariceli Santiago
Patent Examiner
Art Unit 2879


NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800